Amendments To The Claims:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. No claims are currently amended but are listed below for completeness.

Listing of Claims:

1. (currently amended) A method for training a subject for control processes in a task, comprising: decomposing the task into a plurality of cognitive skills related to the control processes; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer, said trainer comprising software operated by a computer for training the subject according to said training strategy, wherein operation of said trainer does not require any physical fidelity to the task, wherein the control process is selected from the group consisting of one or more of executive or attention control processes; wherein the task comprises a sport-related activity; and wherein said software for training the subject provides a plurality of stimuli that are not identical to stimuli received by the subject during performance of the task.

2. (Previously presented) The method of claim 1, wherein said trainer uses at least one physical action being different from an actual physical action performed by the subject when performing the task.

3. (Previously presented) The method of claim 1, wherein said decomposing the task into said plurality of cognitive skills further comprises: decomposing the task into a plurality of actions; and mapping said plurality of actions to said plurality of cognitive skills.

4. (Previously presented) The method of claim 3, wherein said mapping further comprises: analyzing said plurality of actions to determine a plurality of cognitive actions, wherein said cognitive actions are mapped to said plurality of cognitive skills.

5. (Previously presented) The method of claim 1, wherein said determining said training strategy comprises: associating each cognitive skill with at least one action to be performed by the subject.

6. (Previously presented) The method of claim 5, wherein said action in said training strategy further comprises a physical action and a cognitive action, wherein said physical action does not require complete physical fidelity to the task.

7. (Previously presented) The method of claim 6, wherein said determining said training strategy further comprises: coordinating a plurality of actions associated with said cognitive skills.

8. (Previously presented) The method of claim 7, wherein said determining said training strategy further comprises: iteratively adjusting said plurality of actions for said training strategy for said coordinating.

9. (Previously presented) The method of claim 8, wherein said iteratively adjusting said plurality of actions is performed according to at least one heuristic parameter.

10. (Previously presented) The method of claim 5, wherein said determining said training strategy further comprises: determining a sequence of actions to be performed by the subject for training each cognitive skill.

11. (Previously presented) The method of claim 5, wherein said determining said training strategy further comprises: determining a sequence of actions to be performed by the subject for training a plurality of cognitive skills in combination.

12. (Previously presented) The method of claim 1, wherein said determining said training strategy comprises determining at least one action to be performed by the subject and wherein said constructing said trainer comprises: selecting at least one input device and at

least one output device for operation by the subject according to said at least one action to be performed by the subject.

13. (Previously presented) The method of claim 1, wherein said decomposing the task further comprises: determining a plurality of basic skills related to the task; and combining these basic skills into a profile for training the subject.

14. (currently amended) A method for training a subject for control processes in a task, comprising: designing a cognitive simulator for training the subject in the task; constructing a trainer for training the subject according to said cognitive simulator, said trainer comprising software operated by a computer; determining a training plan for training the subject with said trainer, wherein the control process is selected from the group consisting of one or more of executive or attention control processes; the method further comprising: decomposing the task into a plurality of cognitive skills for control processes before said designing said cognitive simulator, such that said designing is performed according to said plurality of cognitive skills; wherein said decomposing the task into said plurality of cognitive skills further comprises: decomposing the task into a plurality of actions; and mapping said plurality of actions to said plurality of cognitive skills; wherein said mapping is performed ~~at least semi-~~automatically.

15. (Previously presented) The method of claim 14, wherein said designing said cognitive simulator comprises: modeling the task to form a model; and designing said cognitive simulator according to said model.

16-17. (canceled)

18. (currently amended) A method for training a subject in a plurality of cognitive skills for a task, comprising: mapping a plurality of actions associated with the task into the plurality of cognitive skills; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer for training the subject according to said

training strategy, wherein operation of said trainer does not require physical fidelity to the task; wherein the task comprises a sport-related object-handling activity; and wherein said software for training the subject provides a plurality of stimuli that are not identical to stimuli received by the subject during performance of the task.

19. (canceled)

20. (previously presented) The method of claim 18, wherein said object-handling activity comprises a ball-handling activity.

21-22.(canceled)

23. (previously presented) A method for training a subject for control processes in a task, comprising: decomposing the task into a plurality of cognitive skills related to the control processes, wherein said decomposing the task into said plurality of cognitive skills further comprises: decomposing the task into a plurality of actions; and mapping said plurality of actions to said plurality of cognitive skills, wherein said mapping further comprises: analyzing said plurality of actions to determine a plurality of cognitive actions, wherein said cognitive actions are mapped to said plurality of cognitive skills; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer, said trainer comprising software operated by a computer for training the subject according to said training strategy, wherein operation of said trainer does not require any physical fidelity to the task, wherein the control process is selected from the group consisting of one or more of executive or attention control processes; wherein said mapping is performed automatically.

24. (Previously presented) The method of claim 1, further comprising determining a training plan for training the subject with said trainer.

25. (Previously presented) The method of claim 24, wherein said determining said training plan further comprises associating at least one parameter for operation of said trainer by the subject with at least one task-related skill or situation.

26. (Previously presented) The method of claim 25, wherein said determining said training plan further comprises assigning a weight to said at least one parameter.

27. (Previously presented) The method of claim 25, wherein said determining said training plan further comprises mapping said at least one parameter to an interaction of the subject with said trainer.

28. (Previously presented) The method of claim 27, wherein said constructing said trainer comprises: selecting at least one input device and at least one output device for operation by the subject according to said cognitive simulator.

29. (Previously presented) The method of claim 28, further comprising: calibrating an operation of said trainer during interactions with the subject.

30. (canceled)

31. (previously presented) The method of claim 1, wherein said sport-related activity comprises an object-handling activity.

32. (Previously presented) The method of claim 31, wherein said object-handling activity comprises a ball-handling activity.

33. (previously presented) The method of claim 1, wherein said sport-related activity comprises an activity of at least one of basketball, baseball, soccer, American football, ice hockey, field hockey, rugby, lacrosse, cricket, golf, tennis, table tennis, volleyball, car

racing, motorcycle racing, bicycle racing, polo, boxing, skiing, snowboarding, fencing, windsurfing, sailing, kite surfing, and hang gliding.

34. (Previously presented) The method claim 33, wherein said sport-related activity comprises a martial art activity of at least one of wrestling, judo, karate, sumo, jujitsu, kick boxing, aikido, taekwondo, and kung-fu.

35. (Previously presented) The method of claim 34, wherein said sport-related activity comprises an activity performed by a plurality of subjects collectively in a team, and wherein at least one cognitive skill is related to performance by a subject as part of said team.

36. (Previously presented) The method of claim 1, wherein said determining said training strategy further comprises characterizing the subject.

37. (canceled)

38. (currently amended) A method for training a subject for control processes in a task, comprising: decomposing the task into a plurality of cognitive skills related to the control processes, wherein said decomposing the task into said plurality of cognitive skills further comprises: decomposing the task into a plurality of actions; and mapping said plurality of actions to said plurality of cognitive skills, wherein said mapping further comprises: analyzing said plurality of actions to determine a plurality of cognitive actions, wherein said cognitive actions are mapped to said plurality of cognitive skills; determining a training strategy according to said plurality of cognitive skills; and constructing a trainer, said trainer comprising software operated by a computer for training the subject according to said training strategy, wherein operation of said trainer does not require any physical fidelity to the task, <u>wherein said software for training the subject provides a plurality of stimuli that are not identical to stimuli received by the subject during performance of the task,</u> wherein the control process is selected from the

group consisting of one or more of executive or attention control processes; wherein said cognitive skill comprises at least one of location perception, motion perception, prediction of future location and perception of distance; wherein the task comprises basketball and said perception of distance comprises perception of distance from a basket.

39. (Previously presented) The method of claim 38, wherein said cognitive skill further comprises perception of a free team-mate.

40. (Previously presented) The method of claim 37, wherein said cognitive skill further comprises a skill for a motor schema.

41. (Previously presented) The method of claim 37, wherein said cognitive skill further comprises a skill for game tactics.

42. (Previously presented) The method of claim 14, wherein said determining said training plan comprises: providing a plurality of cognitive building components; and composing said training plan from said plurality of cognitive building components.

43-52. (canceled)